

the next adjacent course of blocks when the blocks are stacked to form a retaining wall; (b) a downwardly projecting lip to aid in the creation of the desired setback and to facilitate positioning successive courses of blocks in a wall without the use of separate pins or mortar; (c) sidewalls which converge in a rearward direction to facilitate the construction of curved walls; and (d) a decorative front face which may be formed by splitting cured blocks. The converging sidewalls may include notches or indentations, and the blocks may be provided with handles in the form of depressions or cores.”

In the Claims

Please amend claims 30, 35-36, 37, 38, 54, 59, 67, 71, 73, 94 and 98 as follows. Please add new claims 103-112.

30. (Amended) A composite masonry block suitable for forming a retaining wall by dry stacking multiple blocks into successive overlying courses of blocks, said block comprising:

D2 a) a block body, said block body comprising a front surface and a back surface, said front surface and said back surface being substantially parallel to each other and separated by a distance comprising the depth of the block, a generally planar upper surface and a generally planar lower surface, said upper surface and said lower surface being substantially parallel to each other and separated by a distance comprising the height of the block to thereby permit generally parallel alignment between the upper surface of a block and the upper surface of the adjacent blocks in the next adjacent course of blocks, said lower surface having a smaller area than said upper surface, and opposed first and second sidewall surfaces said sidewall surfaces adjoining said block upper and lower surfaces, each of said first and second sidewall surfaces comprising a first part and a second part, said sidewall surface first parts extending from said block front surface towards said block back surface, and intersecting the front surface at an angle of ninety degrees or less, said sidewall surface second parts joining their respective sidewall surface first parts and said block back surface, each sidewall surface second part intersecting the back surface at an angle of less than ninety degrees; and

b) a flange extending downwardly from the block lower surface, said flange comprising a setback surface and a locking surface, said setback surface extending from the lower rear edge of the flange towards said block front surface to adjoin said flange locking surface, said locking surface extending below the plane of said block lower surface.

D3 35. (Amended) The block of claim 30 wherein the sidewall surfaces are generally solid and uninterrupted by indentations.

~~36~~ (Amended) The block of claim ~~30~~ wherein the sidewall surfaces include one or more [notches] indentations.

~~37~~ (Amended) A retaining wall block suitable for use in forming a mortarless retaining wall by dry stacking courses of said blocks, in which the upper surface of such block is solid and uninterrupted by holes for receiving and supporting pins or clips used to locate blocks, said block comprising:

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- a) a pair of substantially parallel and planar upper and lower faces;
 - b) a front face joining the upper and lower faces, which is substantially perpendicular to the upper and lower faces;
 - c) a rear face which is substantially perpendicular to the upper and lower faces;
 - d) a pair of side faces joining the front and rear faces, the side faces being substantially perpendicular to the upper and lower faces, and including rearwardly converging portions, wherein a line drawn on the upper face through the points where the rearwardly converging portions begin is substantially parallel to a line drawn through the points where the side faces join the rear face; and
 - e) a flange extending below the lower face of the block, said flange further including a front locking surface which intersects the lower face of the block;
 - f) wherein the upper face is substantially solid and continuous throughout its extent; and
 - g) wherein the area of the upper face is greater than the area of the lower face.

~~38~~ (Amended) The block of claim ~~37~~ wherein the side faces include one or more [notches] indentations.

~~35~~ 34. (Amended) A retaining wall comprising stacked courses of the block of claim ~~8~~ in

Dy which the front faces of the blocks combine to form a decorative face of the retaining wall, and wherein the lower face of each block in a succeeding course is placed over the upper faces of the abutting blocks in the next lower course, with the downwardly-extending flanges of each block in a succeeding course being positioned immediately behind the uppermost portions of the rear faces of the blocks in the next lower course.

59 (Amended) A composite masonry block suitable for use in forming straight and serpentine retaining walls having a set back from course to course, said block having a block body and an integral locator lip and being the product formed by the process which comprises the steps of [comprising]:

a) [a block body and an integral locator lip formed in] providing a mold having [with] generally vertical sidewalls, an open top and an open bottom seated upon a generally horizontal flat pallet [, by a process comprising the steps of:]

b) [i] filling the mold via its open top with a masonry block mix comprising sand, aggregate, and cement;

c) [ii] vibrating the masonry block mix within the filled mold;

d) [iii] compacting the masonry block mix within the mold by the action of a compression head pushed down on the masonry block mix through the open top of the mold, whereby the masonry block mix forms an uncured unit having the shape imparted to it by the mold, the pallet on which the mold rests, and the compression head;

e) [iv] stripping the uncured unit from the mold via the open bottom of the mold by the combined, relative vertical [action] movement of the compression head and the pallet with respect to the mold, whereby, after stripping, the uncured unit rests on the pallet unsupported by the mold;

f) [v] transporting the uncured unit to a curing location;

g) [vi] curing the uncured unit at the curing location to create a cured unit;

h) obtaining a composite masonry block from the cured unit, [b)] said masonry block having a block body comprising:

i) a generally horizontal upper surface;
ii) a generally horizontal lower surface having a smaller gross area than that of the upper surface;

- iii) a generally vertical front surface;
- iv) a generally vertical back surface, said front and back surfaces being separated by a distance comprising the depth of the block;
- v) a generally vertical first sidewall extending from the front surface to the rear surface, and extending from the upper surface to the lower surface, said first sidewall including a first part that extends away from the front surface at an external angle of less than ninety degrees with respect to the front surface, and a generally planar second part that lies between the sidewall first part and the back surface, and intersects the back surface at an external angle of less than 90 degrees; and
- vi) a generally vertical second sidewall opposed to the first sidewall; and extending from the front surface to the back surface, and extending from the upper surface to the lower surface, said second sidewall including a first part that extends away from the front surface at an external angle of less than 90 degrees with respect to the front surface, and a generally planar second part that lies between the sidewall first part and the back surface, and intersects the back surface at an external angle of less than 90 degrees;
- vii) said block body upper surface being formed by the pallet upon which the mold seats during the molding process, and being substantially planar, substantially solid, and substantially continuous across its whole extent from its intersections with the front surface, the back surface, and each sidewall as a result;
- viii) said block body lower surface being formed by the compression head during the molding process;
- ix) the second parts of the block body sidewalls being formed by the corresponding vertical walls of the mold during the molding process;
- x) said block body back surface being formed by corresponding vertical walls of the mold during the molding process;

c) said integral locator lip being formed on the lower surface of the block body and adjacent to the back surface of the block body, and a forwardly facing locking surface which extends below the lower surface of the block body, the depth of said locator lip being the distance between its locking surface and its back surface measured in the plane of the lower surface of the block body, and wherein the ratio of the depth of the block body to the depth of the locator lip is at least about 6:1;

i) wherein the locking surface is formed by a corresponding surface of the compression head during the molding process.

~~30~~ 67. (Amended) A composite masonry block suitable for dry stacking landscape

applications without the use of pins or mortar, comprising:

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- a) a solid and generally planar top face;
 - b) a bottom face which is generally parallel to the top face;
 - c) a rear face which is generally perpendicular to the top and bottom faces;
 - d) a front face which is generally perpendicular to the top and bottom faces, and

which includes opposed portions located at opposite sides of the front face which are generally perpendicular to the top and bottom faces and which diverge as they extend towards the rear face of the block;

e) opposed side faces, each of said side faces extending from an opposed diverging portion of the front face to the rear face, said side faces converging as they extend towards the rear face;

f) a lower rear locator lip formed integrally with the bottom face of the block, and located adjacent to the rear face of the block, so that the lip is adapted to establish a uniform setback from course to course when a plurality of like blocks are laid in course.

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D7 ~~30~~ 67. (Amended) The block of claim ~~67~~ wherein at least one of the opposed side faces includes at least one [notch] indentation.

~~36~~ (Amended) A concrete block suitable for constructing straight and curved retaining walls by dry stacking multiple blocks into successive overlying courses of blocks without pins or mortar, and capable of being mass produced by automated block-making machines, said block consisting essentially of:

Dp a) a block body having a generally horizontal and substantially planar upper surface and a generally horizontal and substantially planar lower surface, said upper surface and said lower surface being substantially parallel to each other and separated by a vertical distance which is the height of the block with portions of the lower surface of the block being configured to rest on portions of the upper surface of the adjacent blocks in the next lower course of blocks when they are formed into a wall in a manner to cause the upper surfaces of adjacent courses of blocks to be in a substantially parallel relationship;

b) said block body having a generally vertical first front surface and a generally vertical back surface, said first front surface and said back surface being substantially parallel to each other and generally perpendicular to said upper and lower surfaces of said block, said first front and back surfaces being separated by a horizontal distance comprising the depth of the block;

c) a flange or lip integrally formed with the block and extending downwardly from the lower surface of the block adjacent the intersection of the lower surface of the block with the back surface of the block to a point below the lower surface of the block, said flange comprising a lower setback surface and a forward-facing locking surface;

d) said lower surface having a smaller surface area for block-to-block contact than the surface area of said upper surface, said smaller surface area being the result of the formation of the flange on the lower surface;

e) said block having generally vertical two-part left and right sidewall surfaces, each of said left and right sidewall surfaces comprising a substantially planar first or front part and a

substantially planar second or rear part, said first parts having surfaces which do not diverge relative to each other in the direction of said block front surface, and said second or rear parts having surfaces which converge in the direction of said block back surface; and

f) the top surface of said block being substantially solid and continuous across its entire extent.

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94. (Amended) A retaining wall block suitable for use in forming a pinless, mortarless retaining wall, said block comprising:

- a) a pair of substantially parallel and planar upper and lower faces;
- b) a front face joining the upper and lower faces, which is substantially perpendicular to the upper and lower faces;
- c) a rear face which is substantially perpendicular to the upper and lower faces;
- d) a pair of side faces joining the front and rear faces, the side faces being substantially perpendicular to the upper and lower faces and including rearwardly converging portions, wherein a line drawn on the upper face through the points where the rearwardly converging portions begin is substantially parallel to a line drawn through the points where the side faces join the rear face;
- e) a flange extending below the lower face of the block, said flange having a rear face which is substantially an extension of the rear face of the block, said flange further including a front locking surface which intersects the lower face of the block; and
- f) wherein the upper face is substantially solid and continuous throughout its extent.

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98. (Amended) A retaining wall block comprising a front face, a rear face, upper and lower surfaces, opposed side faces and a locator flange, and wherein:

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- (a) the front, rear, and side faces are substantially vertical;
 - (b) the upper and lower surfaces are substantially horizontal and both surfaces are uninterrupted with holes for receiving and supporting pins used to position blocks;
 - (c) the side walls converge towards each other from front to back, so that the front face of the block is wider than the rear face;
 - (d) the flange extends below the lower surface at the rear of the block; and
 - (e) the block is free from cores extending through the block, either from the upper to the lower surface, or from one side to the other.

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103. (New) Blocks of any of claims ~~30, 59, 67, 73, 80, 84, 94~~ or 98 in which;
the upper surface is flat without interruption and in which each of the sidewalls are provided with at least one indentation.

8 67
104. (New) Blocks of any of claims ~~30, 59, 67, 73, 80, 84, 94~~ in which;
the block has one or more vertically oriented cores which extend upward from the bottom of the block to a height of about 60–80% of the block height.

8 68
105. (New) Blocks of any of claims ~~30, 59, 67, 73, 80, 84, 94~~ or 98 in which;
the upper surface is flat without interruptions and in which the sidewalls are flat without more than one indentation per sidewall.

69 ⁴⁹ ~~106~~. (New) Blocks of any of claims ~~30, 59, 67, 73, 80, 84, 94 or 98~~ in which the lower surfaces of the blocks are provided with handles to facilitate transport and placement of the blocks.

70 ⁷⁰ ~~107~~. (New) A masonry block suitable for forming a serpentine retaining wall by dry stacking multiple blocks into successive overlying courses of blocks wherein the sidewalls of adjacent blocks are in contact to avoid gaps between adjacent blocks, said block comprising:

- (a) a block body, said block body comprising a generally vertical front surface and a back surface, said front and back surfaces being separated by a distance comprising the depth of the block; a generally planar upper surface and a lower surface, said upper and lower surfaces intersecting said generally vertical front surface and permitting generally parallel alignment between the upper surface of a block and the upper surface of the adjacent blocks in the next adjacent course of blocks, and first and second sidewall surfaces, each of said sidewall surfaces comprising a first part and a second part, said sidewall surface first parts extending rearwardly from the block front surface at an angle of ninety degrees or less, and the sidewall surface second parts joining their respective sidewall surface first parts to the back surface, said second parts converging toward each other and intersecting the back surface at an angle of less than ninety degrees; and
- (b) a flange extending downwardly from the lower surface of the block body, said flange comprising a setback surface and a locking surface, said flange permitting the masonry block to be positioned over and in engagement with other masonry blocks as courses of blocks are laid one on another, thereby producing the desired setback.

71 ⁷¹ ~~108~~. (New) Blocks of Claim 107 in which the upper surface is solid and uninterrupted.